

宇田雄一「古典物理学」

⑨ $\forall v, w \in F_5; \forall n \in \mathbb{N}; \forall x, y, z \in F_{4, n}; \forall m \in \mathbb{R}(\{1, \dots, n\});$
 $[[1] \text{ and } [2]] \Rightarrow e_7(v + w, z, m)$

【1】 $x(N_3) + y(N_3) = z(N_3) \text{ and } x(N_{2, n}) = z(N_{2, n})$

【2】 $e_7(v, x, m) \text{ and } e_7(w, y, 0)$

⑩ $\forall v, w \in F_5; \forall r, s \in \mathbb{N}; \forall x \in F_{4, r}; \forall y \in F_{4, s}; \forall z \in F_{4, r+s};$
 $\forall m_1 \in \mathbb{R}(\{1, \dots, r\}); \forall m_2 \in \mathbb{R}(\{1, \dots, s\});$
 $\forall m_3 \in \mathbb{R}(\{1, \dots, r+s\}); [[1] \text{ and } [2] \text{ and } [3] \text{ and } [4]] \Rightarrow [5]$

【1】 $x(N_3) + y(N_3) = z(N_3)$

【2】 $\forall k \in \{1, \dots, r\}; x(N_1, k) = z(N_1, k) \text{ and } m_1(k) = m_3(k)$

【3】 $\forall k \in \{1, \dots, s\}; y(N_1, k) = z(N_1, r+k) \text{ and } m_2(k) = m_3(r+k)$

【4】 $e_7(v, x, m_1) \text{ and } e_7(w, y, m_2)$

【5】 $e_7(v + w, z, m_3)$

⑪ $\forall r, s \in \mathbb{N}; \forall x \in F_{6, r}; \forall y \in F_{6, s}; \forall z \in F_{6, r+s};$
 $\forall m_1 \in \mathbb{R}(2 \times \{1, \dots, r\}); \forall m_2 \in \mathbb{R}(2 \times \{1, \dots, s\});$
 $\forall m_3 \in \mathbb{R}(2 \times \{1, \dots, r+s\}); [[1] \text{ and } [2] \text{ and } [3] \text{ and } [4]] \Rightarrow [5]$

【1】 $x(N_3 \cup N_5) + y(N_3 \cup N_5) = z(N_3 \cup N_5)$

【2】 $\forall k \in \{1, \dots, r\}; x(N_1, k) = z(N_1, k) \text{ and } m_1(k) = m_3(k)$

【3】 $\forall k \in \{1, \dots, s\}; y(N_1, k) = z(N_1, r+k) \text{ and } m_2(k) = m_3(r+k)$

【4】 $e_8(x, m_1) \text{ and } e_8(y, m_2)$

【5】 $e_8(z, m_3)$